

## WHAT IS CLAIMED IS:

1. A method of supporting operation of legacy customer equipment in a system where at least a portion of the legacy customer equipment receives non-supported signals, the method comprising:
  - 5 configuring a transcoding unit for operation with the legacy customer equipment, the transcoding unit configured to transcode non-supported signals to supported signals which are compatible with the customer equipment.
2. The method of claim 1 wherein the legacy customer equipment are settop boxes (STBs) having onboard conditional access decryption capabilities and wherein the method further comprises configuring the transcoding unit to interface through a card interface of the STBs.
3. A method of transcoding dissimilar payloads carried in a first transport stream, the method comprising:
  - 15 demultiplexing the first transport stream to recover first and second payloads;
  - transcoding the second payload to a protocol associated with the first payload if a protocol associated with the second payload is dissimilar from the protocol associated with the first payload; and
  - 20 multiplexing the first payload and the transcoded second payload to a second transport stream.
4. The method of claim 3 further comprising associating the first payload with MPEG-2 protocols and associating the second payload with AVC protocols such the second payload is transcoded to MPEG-2 protocols.
5. The method of claim 4 further comprising associating the AVC protocols with MPEG-4 protocols
6. The method of claim 4 further comprising associating the AVC protocols with H.264 protocols.

7. The method of claim 3 further comprising decrypting conditional access (CA) encryption of the first transport stream prior to demultiplexing.

8. The method claim 7 further comprising decrypting the CA  
5 encryption of the first transport stream in a settop box (STB).

9. The method of claim 8 further comprising demultiplexing, transcoding, and multiplexing the first and second payloads in a card inserted into a card slot of the STB.

10. The method of claim 9 further comprising decoding copy  
10 protection of the first transport stream in the card and prior to the demultiplexing, transcoding, and multiplexing.

11. The method of claim 10 further comprising encoding copy protection to the second transport stream.

12. The method of claim 11 further comprising transmitting the  
15 copy protection encoded second transport stream from the card to the STB.

13. The method of claim 3 further comprising associating the first transport stream with MPEG-2 protocols.

14. The method of claim 13 further comprising determining if the  
20 protocol associated with the second payload is dissimilar form the protocol associated with the first payload as a function of instructions associated with the MPEG-2 protocols of the first transport stream.

15. The method of claim 3 further comprising associating the first and second transport streams with MPEG-2 protocols.

16. A system of providing digital television signals to a media output device, the system comprising:

a host configured to decode signals carried in payloads of a first payload type for playback on the media output device; and

5 a unit configured for transcoding digital television signals carried in payloads of a second payload type to the first payload type for output to the host, the second payload type being associated with protocols dissimilar to protocols associated with the first payload type.

10 17. The system of claim 16 wherein the host is configured to only decode signals carried in the first payload type.

18. The system of claim 16 wherein the first payload type is associated with MPEG-2 protocols.

15 19. The system of claim 16 further comprising a provider for providing the signals in a first transport stream, wherein the first transport stream carries the signals in payloads of the first and second payload types.

20 20. The system of claim 19 wherein the unit includes a demultiplexer for demultiplexing the first transport stream to recover the payloads; a transcoder for transcoding the second payload type to the first payload type; and a multiplexer for multiplexing payloads of the first payload type with transcoded payloads of the second payload type to a second transport stream for output to the host.

25 21. The system of claim 20 wherein the unit includes a bypass for bypassing payloads associated with the first payload type past the transcoder to the multiplexer such that the bypassed payloads are multiplexed at the multiplexer with the transcoded payloads.

22. The system of claim 21 wherein the transcoder only transcodes payloads from the second payload type to the first payload type.

23. The system of claim 16 wherein the host is a settop box (STB).

24. The system of claim 23 wherein the unit is a card configured to insert within a slot of the STB.

5 25. The system of claim 16 wherein the host is a digital video recorder (DVR).

26. A transcoding unit for use with legacy settop boxes (STBs) which only supports playback of digital television (DTV) signals encoded according to non-advance video compression (AVC) standards and not DTV signals encoded according to AVC standards, the transcoding unit comprising:

10 a transcoder configured to transcode DTV signals associated with the AVC standards to DTV signals associated with non-AVC standards so as to permit playback of the transcoded DTV signals with the legacy STB.

27. The transcoding unit of claim 26 wherein the transcoder is included with a card configured to insert within a slot of the legacy STBs and wherein the STB includes onboard conditional access decryption capabilities.

28. The transcoding unit of claim 27 wherein the DTV signals are carried in payloads of a first transport stream, and wherein the transcoding unit further comprising a demultiplexer for determining whether the first transport stream includes payloads associated with the AVC standards or the non-AVC standards and to transport payloads associated with the AVC standards to the transcoder and to transport payloads associated with the non-AVC standards to a multiplexer, wherein the transcoder transcodes the payloads associated with the AVC standards to payloads associated with the non-AVC standards and outputs the transcoded payloads the multiplexer, and wherein the multiplexer combines the bypassed payloads with the transcoded payloads to a second transport stream for output to the legacy STB.